

## Common Specification for output data of Ophthalmic Examination Equipment 01 (JOIA · STD)

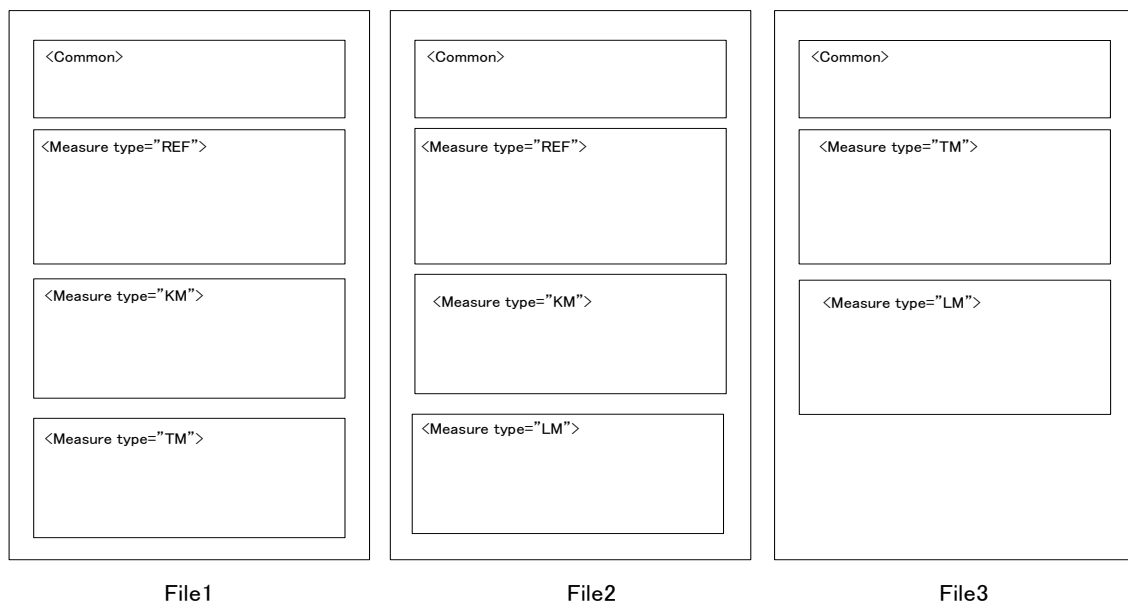
- Common Specification for output data of Refractometer / Keratometer / Tonometer and Lensmeter –

### 1. Data classifications

#### 1-1. Handling of Files

It is possible to handle multiple data classifications such as refractometer, keratometer, tonometer and lensmeter within one XML file. The data of refractometer, keratometer, tonometer and lensmeter can be handled in one file or they can be separated in individual files. The file has <Ophthalmology> tag as a top tag, and tag of each data classification exists in the top tag. The example of data classification constitution in the XML file is shown as below.

#### ■ Example of data classification constitution in the file



- \* The file has <Ophthalmology> tag as a top tag.
- \* It is possible to handle all the data classifications in one file, or they can be separated by files.
- \* It is also possible to handle the data classifications specified in the common specification for data output of other Ophthalmic Examination Equipment (02 - ) in one file.

## 1-2. Handling of data classifications

The data classifications of refractometer, keratometer, tonometer and such are maintained as attribute value (type) of <Measure> tag.

### ■ Attribute value and classification

Attribute value (type)	Data classification
REF	Refractometer data
KM	Keratometer data
TM	Tonometer data
LM	Lensmeter data
.	.

The example with refractometer, keratometer, tonometer and lensmeter data are shown as below.

```
ex) In the case of having refractometer, keratometer,  
tonometer and lensmeter data.  
<Measure type="REF">    <--- Refractometer data  
    . . . . .  
</Measure>  
<Measure type="KM">    <--- Keratometer data  
    . . . . .  
</Measure>  
<Measure type="TM">    <--- Tonometer data  
    . . . . .  
</Measure>  
<Measure type="LM">    <--- Lensmeter data
```

## 1-3. Character code

The character code within XML file is UTF-8 or UTF-16.

## 1-4. Description of style sheet

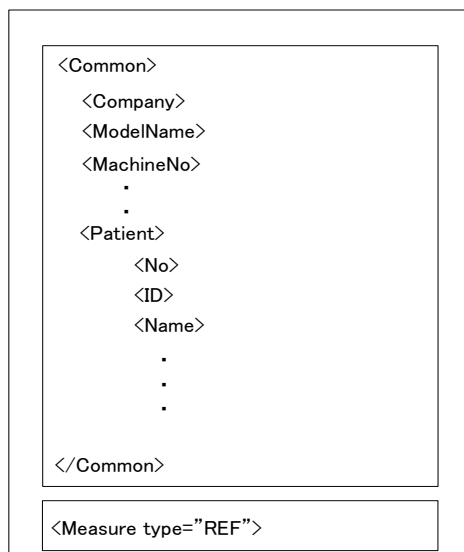
Description of the style sheet in the XML file is optional.

## 2. Common data

### 2-1. Handling of common data

Common data such as patient information is included in <Common> element. One common data exists in one file. (See “4 . Tag definition” on common data elements)

#### ■ Example of common data in a file



## 3. Data definition

### 3-1. Data type definition

Tag elements of each data classification such as refractometer, keratometer, tonometer and lensmeter are defined by XML schema. Data types of values on each tag are also defined by the schema. Moreover, it is determined by the schema definition whether it is a required tag or permit overlaps.

### 3-2. Handling of unit

The unit of the numerical data is described as attribute value "Unit".

ex) Sphere data of refractometer  
<Sphere unit="D">0.25</Sphere>

#### 4. Tag definition

The items described in the necessity field have following meanings.

Any: Tags are optional. They can be omitted.

No sign: No tags or values are necessary.

△: Tags are necessary even if no value is entered.

○: Tags and values are necessary.

\* Indicates that lower tags are necessary when an upper tag exists.

##### ■ Ophthalmology tag

Tag name	Description	Data type	Necessity
<Ophthalmology>	Ophthalmic data	-	○

##### ■ Common data

Tag name	Description	Data type	Necessity
<Common>	Common tag	-	○
<Company>	Company name	String (64 characters)	○
<ModelName>	Model name	string (64 characters)	○
<MachineNo>	No. for distinction among the devices of the same model.	string (64 characters)	△
<ROMVersion>	No. for distinction among the models with the same ROM version.	string (64 characters)	△
<Version>	XML specifications version (fixed)	string (64 characters)	○
<Date>	Date (year, month, day)	date	○
<Time>	Time (hour, minute, second)	time	○
<Patient>	Patient	-	○
<No.>	Patient No. (number of the order of examination)	string (64 characters)	△
<ID>	Patient ID	string (64 characters)	○
<FirstName>	Patient's first name	string (64 characters)	△
<MiddleName>	Patient's middle name	string (64 characters)	△
<LastName>	Patient's last name	string (64 characters)	△
<Sex>	Patient's sex	string (M, F, O only)	△
<Age>	Patient's age	int	△
<DOB>	Patient's date of birth	date	△
<NameJ1>	Patient's name in other languages	string (64 characters)	△
<NameJ2>	Patient's name in other languages	string (64 characters)	△
<Operator>	Operator	-	
<No.>	Operator No.	string (64 characters)	△

	<ID>	Operator ID	string (64 characters)	△
Unique tag of each company can be optionally defined here.				any

■ Refractometer data

Tag name	Description	Data type	Necessity
<Measure type="REF">	Measurement type tag	-	○
<VD unit="mm">	Corneal vertex distance	double	○
<DiopterStep unit="D">	Diopter increment	double	△
<AxisStep unit="deg">	Angle increment	int	△
<CylinderMode>	Cylinder mode (-,+,mix)	string(-,+,mix only)	△
<REF>			
<R>	Right eye measurement value	-	
<List No=" ">	Measurement value (1 to n times)	-	○
<Sphere unit="D">	Spherical refractive power (D)	double	○
<Cylinder unit="D">	Cylindrical refractive power (D)	double	○
<Axis unit="deg">	Cylinder axis (°)	int	○
<SE unit="D">	Spherical equivalent refraction (D)	double	△
<CataractMode>	CAT mode	string (64 characters)	△
<IOLMode>	IOL mode	string (64 characters)	△
<ConfidenceIndex>	Confidence index	string (64 characters)	△
<List No=" ">	Measurement value (In case of error)	-	
<Error>	Error characters	string (64 characters)	△
<Median>	Median values	-	
<Sphere unit="D">	Spherical refractive power (D)	double	○
<Cylinder unit="D">	Cylindrical refractive power (D)	double	○
<Axis unit="deg">	Cylinder axis (°)	int	○
<SE unit="D">	Spherical equivalent refraction (D)	double	△
<L>	Left eye measurement value	-	
<List No=" ">	Measurement value (1 to n times)	-	○
<Sphere unit="D">	Spherical refractive power (D)	double	○
<Cylinder unit="D">	Cylindrical refractive power (D)	double	○
<Axis unit="deg">	Cylinder axis (°)	int	○
<SE unit="D">	Spherical equivalent refraction (D)	double	△

	<CataractMode>	CAT mode	string (64 characters)	△
	<IOLMode>	IOL mode	string (64 characters)	△
	<ConfidenceIndex>	Confidence index	string (64 characters)	△
	<List No=" " >	Measurement value (In case of error )	-	
	<Error>	Error characters	string (64 characters)	△
	<Median>	Median values	-	
	<Sphere unit="D">	Spherical refractive power (D)	double	○
	<Cylinder unit="D">	Cylindrical refractive power (D)	double	○
	<Axis unit="deg">	Cylinder axis ( ° )	int	○
	<SE unit="D">	Spherical equivalent refraction (D)	double	△
	<PD>	Pupillary distance	-	
	<WorkingDistance unit="cm">	Working distance	int	△
	<Distance unit="mm">	Distance PD	double	○
	<Near unit="mm">	Near PD	double	△
	Unique tag of each company can be optionally defined here.			any

■ Keratometer data

Tag name	Description	Data type	Necessity
<Measure type="KM">	Measurement type tag	-	○
<DiopterStep unit="D">	Corneal refractive power increment	double	△
<AxisStep unit="deg">	Angle increment	int	△
<CylinderMode>	Cylinder mode (-,+ ,mix)	string(-,+ ,mix only)	△
<RefractiveIndex >	Corneal refractive index	double	○
<KM>			
<R>	Right eye measurement value	-	
<List No=" " >	Measurement value (1 to n times)	-	○
<R1>		-	○
<Radius unit="mm">	Curvature radius	double	○
<Power unit="D">	Corneal refractive power	double	○
<Axis unit="deg">	Axis angle	int	○
<R2>		-	○
<Radius unit="mm">	Curvature radius	double	○
<Power unit="D">	Corneal refractive	double	○

		power		
	<Axis unit="deg">	Axis angle	int	○
	<Average>	Average value	-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	△
	<Cylinder>	Cylinder power	-	○
	<Power unit="D">	Cylindrical refractive power	double	○
	<Axis unit="deg">	Cylinder axis angle	int	○
<List No=" ">		Measurement value (In case of error )	-	
	<Error>	Error characters	string (64 characters)	△
<Median>		Median values	-	
	<R1>		-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	○
	<Axis unit="deg">	Axis angle	int	○
	<R2>		-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	○
	<Axis unit="deg">	Axis angle	int	○
	<Average>	Average value	-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	△
	<Cylinder>	Cylindrical power	-	○
	<Power unit="D">	Cylindrical refractive power	double	○
	<Axis unit="deg">	Cylinder axis angle	int	○
<L>		Left eye measurement value	-	
	<List No=" ">	Measurement value (1 to n times)	-	○
	<R1>		-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	○
	<Axis unit="deg">	Axis angle	int	○
	<R2>		-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive power	double	○
	<Axis unit="deg">	Axis angle	int	○
	<Average>	Average value	-	○
	<Radius unit="mm">	Curvature radius	double	○
	<Power unit="D">	Corneal refractive value	double	△
	<Cylinder>	Cylinder power	-	○

		<Power unit="D">	Cylindrical refractive power	double	○
		<Axis unit="deg">	Cylinder axis angle	int	○
<List No=" ">			Measurement value (In case of error)	-	
	<Error>		Error characters	string (64 characters)	△
<Median>			Median values	-	
	<R1>			-	○
		<Radius unit="mm">	Curvature radius	double	○
		<Power unit="D">	Corneal refractive power	double	○
		<Axis unit="deg">	Axis angle	int	○
	<R2>			-	○
		<Radius unit="mm">	Curvature radius	double	○
		<Power unit="D">	Corneal refractive power	double	○
		<Axis unit="deg">	Axis angle	int	○
	<Average>		Average value	-	○
		<Radius unit="mm">	Curvature radius	double	○
		<Power unit="D">	Corneal refractive power	double	△
	<Cylinder>		Cylinder power	-	○
		<Power unit="D">	Cylindrical refractive power	double	○
		<Axis unit="deg">	Cylinder axis angle	int	○
<Pupil>			Pupil size data	-	
	<R>		Right eye measurement value	-	
		<PupilSize unit="mm" Lamp="on">	Pupil size	double	△
	<L>		Left eye measurement value	-	
		<PupilSize unit="mm" Lamp="on">	Pupil size	double	△
<Corneal>			Corneal size data	-	
	<R>		Right eye measurement value	-	
		<CornealSize unit="mm">	Corneal size	double	△
	<L>		Left eye measurement value	-	
		<CornealSize unit="mm">	Corneal size	double	△
Unique tag of each company can be optionally defined here.					any



■ Tonometer data

Tag name	Description	Data type	Necessity
<Measure type="TM">	Measure type tag	-	○
<TM>			
<R>	Right eye measurement value	-	
<List No=" " >	Measurement value (0 to n times)	-	
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double string	△
<ConfidenceIndex>	Confidence index	(64 characters)	△
<Average>	Average value	-	○
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double	△
	↓ In case of error		
<Error>	Error characters	string (64 characters)	△
<L>	Left eye measurement value	-	
<List No=" " >	Measurement value (0 to n times)	-	
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double string	△
<ConfidenceIndex>	Confidence index	(64 characters)	△
<Average>	Average value	-	○
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double	△
	↓ In case of error		
<Error>	Error characters	string (64 characters)	△
<CorrectedIOP>			
<Formula1 No=" " >	Correction Formula1 (0 to n) *3	-	
<R>	Right eye data	-	
<Param1 unit="mm">	Parameter 1(mm)	double	△
<Param2>	Parameter2	double	△
<CCT unit="mm">	Central corneal thickness	double	△
<Measured>	Measurement value	-	
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double	△
<Corrected>	Corrected value	-	○
<IOP_mmHg unit="mmHg">	Corrected intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Corrected intraocular pressure (kPa) or (hPa)	double	△
<L>	Left eye data	-	

<Param1 unit="mm">	Parameter 1(mm)	double	△
<Param2>	Parameter2	double	△
<CCT unit="mm">	Central corneal thickness	double	△
<Measured>	Measurement value	-	
<IOP_mmHg unit="mmHg">	Intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Intraocular pressure (kPa) or (hPa)	double	△
<Corrected>	Corrected value	-	○
<IOP_mmHg unit="mmHg">	Corrected intraocular pressure (mmHg)	double	○
<IOP_Pa unit="kPa">*2	Corrected intraocular pressure (kPa) or (hPa)	double	△
Unique tag of each company can be optionally defined here.			any

\*2: Both "kPa" and "hPa" can be used for the unit of intraocular pressure (attribute of <IOP\_Pa> tag) listed in Pascal.

\*3: Correction Formula 1 (correction formula of corrected intraocular pressure)

Following correction formula is used for calculation of the corrected intraocular pressure:

Corrected IOP value = Measurement intraocular pressure value + Intraocular pressure correction value

IOP correction value = (Param1 × 1000 - CCT × 1000) × Param2

Correction factor: Param1: Reference central corneal thickness (mm)

CCT : Central corneal thickness (mm)

Param2 : Parameter 2 correction amount adjustment factor (0.0001 to 1.0000)

■ Lensmeter data

Tag name	Description	Data type	Necessity
<Measure type="LM">	Measurement type tag	-	○
<MeasureMode>	Measurement mode ( Normal, Progressive, Contact )	string (64 characters)	△
<DiopterStep unit="D">	Diopter increment	double	△
<AxisStep unit="deg">	Cylinder axis angle increment	int	△
<CylinderMode>	Cylinder mode(-,+ ,mix)	string(-,+ ,mix only)	△
<PrismDiopterSetp unit="pri">	Prism diopter increment	double	△
<PrismBaseStep unit="deg">	Prism base increment	int	△
<PrismMode>	Prism mode	string(pb,xy only)	△
<AddMode>	Additional power mode	string(add,nsph only)	△
<LM>			
<S>	Single measurement value	-	
<Sphere unit="D">	Spherical power (D)	double	○
<Cylinder unit="D">	Cylindrical power (D)	double	○
<Axis unit="deg">	Cylinder axis (° )	int	○

	<SE unit="D">	Spherical equivalent (D)	double	△
	<ADD unit="D">	Additional power (D)	double	△
	<ADD2 unit="D">	Second additional power (D)	double	△
	<NearSphere unit="D">	Near spherical power (D)	double	△
	<NearSphere2 unit="D">	Spherical power for second near portion (D)	double	△
	<Prism unit="pri">	Prism diopter (△)	double	△
	<PrismBase unit="deg">	Prism base angle (° )	int	△
	<PrismX unit="pri" base="out">	Horizontal prism diopter (△) (base=in, out only)	double	△
	<PrismY unit="pri" base="up">	Vertical prism diopter (△) (base=up, down only)	double	△
	<UVTransmittance unit="%">	UV transmittance (%)	int	△
	<ConfidenceIndex>	Confidence index	string (64 characters)	△
<S>		Single measurement value( In case of error)		
	<Error>	Error information	string (64 characters)	△
<R>		Right eye measurement value	-	
	<Sphere unit="D">	Spherical power (D)	double	○
	<Cylinder unit="D">	Cylindrical power (D)	double	○
	<Axis unit="deg">	Cylinder axis (° )	int	○
	<SE unit="D">	Spherical equivalent (D)	double	△
	<ADD unit="D">	Additional power (D)	double	△
	<ADD2 unit="D">	Second additional power (D)	double	△
	<NearSphere unit="D">	Near spherical power (D)	double	△
	<NearSphere2 unit="D">	Spherical power for second near portion (D)	double	△
	<Prism unit="pri">	Prism diopter (△)	double	△
	<PrismBase unit="deg">	Prism base angle (° )	int	△
	<PrismX unit="pri" base="out">	Horizontal prism diopter (△) (base=in, out only)	double	△
	<PrismY unit="pri" base="up">	Vertical prism diopter (△) (base=up, down only)	double	△
	<UVTransmittance unit="%">	UV transmittance (%)	int	△
	<ConfidenceIndex>	Confidence Index	string (64 characters)	△
<R>		Right eye measurement value (in case of error)		
	<Error>	Error information	string (64 characters)	△
<L>		Left eye measurement value	-	
	<Sphere unit="D">	Spherical power (D)	double	○
	<Cylinder unit="D">	Cylindrical power (D)	double	○
	<Axis unit="deg">	Cylinder axis (° )	int	○
	<SE unit="D">	Spherical equivalent (D)	double	△
	<ADD unit="D">	Additional power (D)	double	△
	<ADD2 unit="D">	Second additional power (D)	double	△
	<NearSphere unit="D">	Near spherical power (D)	double	△

	<NearSphere2 unit="D">	Spherical power for second near portion (D)	double	△
	<Prism unit="pri">	Prism diopter (Δ)	double	△
	<PrismBase unit="deg">	Prism base angle (°)	int	△
	<PrismX unit="pri" base="out">	Horizontal prism diopter (Δ) (base=in, out only)	double	△
	<PrismY unit="pri" base="up">	Vertical prism diopter (Δ) (base=up, down only)	double	△
	<UVTransmittance unit="%">	UV transmittance (%)	int	△
	<ConfidenceIndex>	Confidence index	string (64 characters)	△
	<L>	Left eye measurement value (in case of error)		
	<Error>	Error information	string (64 characters)	△
<b>&lt;PD&gt;</b>				
	<Distance unit="mm">	Far pupillary distance	double	△
	<DistanceR unit="mm">	Right eye far pupillary distance	double	△
	<DistanceL unit="mm">	Left eye far pupillary distance	double	△
	<Near unit="mm">	Near pupillary distance	double	△
	<NearR unit="mm">	Right eye near pupillary distance	double	△
	<NearL unit="mm">	Left eye near pupillary distance	double	△
Unique tag of each company can be optionally defined here.				any

## 4. Namespaces

### 4-1. Definition of namespace

XML namespace is defined for every data classification.

The prefix added to each data classification is as below.

Data classification	XML Namespace prefix
Common data	nsCommon
Refractometer data	nsREF
Keratometer data	nsKM
Tonometer data	nsTM
Lensmeter data	nsLM
•	•
•	•

## 5. Schema definition file

### 5-1. Schema file

The tag definition of each data type is described in a schema file. The schema file is prepared for each data type.

Data classification	XML Namespace prefix
Common data	Common_schema.xsd
Refractometer data	REF_schema.xsd
Keratometer data	KM_schema.xsd
Tonometer data	TM_schema.xsd
Lensmeter data	LM_schema.xsd
・	・
・	・

## ○ XML file sample of refractometer data

```
-----
<?xml version="1.0" encoding="UTF-8"?>

<Ophthalmology xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:nsCommon="http://www.joia.or.jp/standardized/namespaces/Common"
xmlns:nsREF="http://www.joia.or.jp/standardized/namespaces/REF"
xsi:schemaLocation="http://www.joia.or.jp/standardized/namespaces/Common Common_schema.xsd
http://www.joia.or.jp/standardized/namespaces/REF REF_schema.xsd">

  <nsCommon:Common>

    <nsCommon:Company>ABCD</nsCommon:Company>
    <nsCommon:ModelName>ABC-123</nsCommon:ModelName>
    <nsCommon:MachineNo>1234</nsCommon:MachineNo>
    <nsCommon:ROMVersion>1.0</nsCommon:ROMVersion>
    <nsCommon:Version>1.4</nsCommon:Version>
    <nsCommon:Date>2008-09-01</nsCommon:Date>
    <nsCommon:Time>19:36:28</nsCommon:Time>

    <nsCommon:Patient>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
      <nsCommon:FirstName>TARO</nsCommon:FirstName>
      <nsCommon:MiddleName></nsCommon:MiddleName>
      <nsCommon:LastName>TANAKA</nsCommon:LastName>
      <nsCommon:Sex>M</nsCommon:Sex>
      <nsCommon:Age>18</nsCommon:Age>
      <nsCommon:DOB>1975-08-16</nsCommon:DOB>
      <nsCommon:NameJ1>田中 太郎</nsCommon:NameJ1>
      <nsCommon:NameJ2>たなか たろう</nsCommon:NameJ2>
    </nsCommon:Patient>

    <nsCommon:Operator>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
    </nsCommon:Operator>

  </nsCommon:Common>

  <nsREF:Measure type="REF">

    <nsREF:VD unit="mm">12.00</nsREF:VD>
    <nsREF:DiopterStep unit="D">0.25</nsREF:DiopterStep>
    <nsREF:AxisStep unit="deg">5</nsREF:AxisStep>
    <nsREF:CylinderMode>-</nsREF:CylinderMode>

    <nsREF:REF>

      <nsREF:R>
        <nsREF:List No="1">
          <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
          <nsREF:Cylinder unit="D">0.25</nsREF:Cylinder>
          <nsREF:Axis unit="deg">180</nsREF:Axis>
        </nsREF:List No="1">
      </nsREF:R>
    </nsREF:REF>
  </nsREF:Measure type="REF">

```

```
<nsREF:SE unit="D"></nsREF:SE>
<nsREF:CataractMode>on</nsREF:CataractMode>
<nsREF:IOLMode>on</nsREF:IOLMode>
<nsREF:ConfidenceIndex>9</nsREF:ConfidenceIndex>
</nsREF:List>
<nsREF:List No="2">
  <nsREF:Error></nsREF:Error>
</nsREF:List>
<nsREF:List No="3">
  <nsREF:Sphere unit="D">-0.50</nsREF:Sphere>
  <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
  <nsREF:Axis unit="deg">90</nsREF:Axis>
  <nsREF:SE unit="D">-2.75</nsREF:SE>
  <nsREF:CataractMode>on</nsREF:CataractMode>
  <nsREF:IOLMode>on</nsREF:IOLMode>
  <nsREF:ConfidenceIndex>5</nsREF:ConfidenceIndex>
</nsREF:List>
</nsREF:R>
<nsREF:L>
  <nsREF:List No="1">
    <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
    <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
    <nsREF:Axis unit="deg">180</nsREF:Axis>
    <nsREF:SE unit="D">-2.75</nsREF:SE>
    <nsREF:CataractMode>on</nsREF:CataractMode>
    <nsREF:IOLMode>on</nsREF:IOLMode>
    <nsREF:ConfidenceIndex>9</nsREF:ConfidenceIndex>
  </nsREF:List>
  <nsREF:List No="2">
    <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
    <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
    <nsREF:Axis unit="deg">180</nsREF:Axis>
    <nsREF:SE unit="D">-2.75</nsREF:SE>
    <nsREF:CataractMode>on</nsREF:CataractMode>
    <nsREF:IOLMode>on</nsREF:IOLMode>
    <nsREF:ConfidenceIndex>9</nsREF:ConfidenceIndex>
  </nsREF:List>
  <nsREF:List No="3">
    <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
    <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
    <nsREF:Axis unit="deg">180</nsREF:Axis>
    <nsREF:SE unit="D">-2.75</nsREF:SE>
    <nsREF:CataractMode>on</nsREF:CataractMode>
    <nsREF:IOLMode>on</nsREF:IOLMode>
    <nsREF:ConfidenceIndex>9</nsREF:ConfidenceIndex>
  </nsREF:List>
  <nsREF:List No="4">
    <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
    <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
    <nsREF:Axis unit="deg">180</nsREF:Axis>
    <nsREF:SE unit="D">-2.75</nsREF:SE>
    <nsREF:CataractMode>on</nsREF:CataractMode>
    <nsREF:IOLMode>on</nsREF:IOLMode>
    <nsREF:ConfidenceIndex>E</nsREF:ConfidenceIndex>
  </nsREF:List>
  <nsREF:List No="5">
```

```
<nsREF:Sphere unit="D">-0.50</nsREF:Sphere>
<nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
<nsREF:Axis unit="deg">90</nsREF:Axis>
<nsREF:SE unit="D">-2.75</nsREF:SE>
<nsREF:CataractMode>on</nsREF:CataractMode>
<nsREF:IOLMode>on</nsREF:IOLMode>
<nsREF:ConfidenceIndex>5</nsREF:ConfidenceIndex>
</nsREF:List>
<nsREF:List No="6">
  <nsREF:Sphere unit="D">+0.50</nsREF:Sphere>
  <nsREF:Cylinder unit="D">1.50</nsREF:Cylinder>
  <nsREF:Axis unit="deg">180</nsREF:Axis>
  <nsREF:SE unit="D">-2.75</nsREF:SE>
  <nsREF:CataractMode>on</nsREF:CataractMode>
  <nsREF:IOLMode>on</nsREF:IOLMode>
  <nsREF:ConfidenceIndex>6</nsREF:ConfidenceIndex>
</nsREF:List>
<nsREF:Median>
  <nsREF:Sphere unit="D">-2.50</nsREF:Sphere>
  <nsREF:Cylinder unit="D">0.50</nsREF:Cylinder>
  <nsREF:Axis unit="deg">180</nsREF:Axis>
  <nsREF:SE unit="D">-2.75</nsREF:SE>
</nsREF:Median>
</nsREF:L>

</nsREF:REF>

<nsREF:PD>
  <nsREF:WorkingDistance unit="cm">40</nsREF:WorkingDistance>
  <nsREF:Distance unit="mm">62.5</nsREF:Distance>
  <nsREF:Near unit="mm">60.5</nsREF:Near>
</nsREF:PD>

<(Unique tag)>
  .
  .
  .
</(Unique tag)>

</nsREF:Measure>

</Ophthalmology>
```

Unique tag of each company is specified here. Prefix is not necessary because it is out of the namespace definition.



## ○ XML file sample of keratometer data

```
-----
<?xml version="1.0" encoding="UTF-8"?>

<Ophthalmology xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:nsCommon="http://www.joia.or.jp/standardized/namespaces/Common"
xmlns:nsREF="http://www.joia.or.jp/standardized/namespaces/KM"
xsi:schemaLocation="http://www.joia.or.jp/standardized/namespaces/Common Common_schema.xsd
http://www.joia.or.jp/standardized/namespaces/KM KM_schema.xsd">

  <nsCommon:Common>

    <nsCommon:Company>ABCD</nsCommon:Company>
    <nsCommon:ModelName>ABC-123</nsCommon:ModelName>
    <nsCommon:MachineNo>1234</nsCommon:MachineNo>
    <nsCommon:ROMVersion>1.0</nsCommon:ROMVersion>
    <nsCommon:Version>1.4</nsCommon:Version>
    <nsCommon:Date>2008-09-01</nsCommon:Date>
    <nsCommon:Time>19:36:28</nsCommon:Time>

    <nsCommon:Patient>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
      <nsCommon:FirstName>TARO</nsCommon:FirstName>
      <nsCommon:MiddleName></nsCommon:MiddleName>
      <nsCommon:LastName>TANAKA</nsCommon:LastName>
      <nsCommon:Sex>M</nsCommon:Sex>
      <nsCommon:Age>18</nsCommon:Age>
      <nsCommon:DOB>1975-08-16</nsCommon:DOB>
      <nsCommon:NameJ1>田中 太郎</nsCommon:NameJ1>
      <nsCommon:NameJ2>たなか たろう</nsCommon:NameJ2>
    </nsCommon:Patient>

    <nsCommon:Operator>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
    </nsCommon:Operator>

  </nsCommon:Common>

  <nsKM:Measure type="KM">

    <nsKM:DiopterStep unit="D">0.25</nsKM:DiopterStep>
    <nsKM:AxisStep unit="deg">5</nsKM:AxisStep>
    <nsKM:CylinderMode>-</nsKM:CylinderMode>
    <nsKM:RefractiveIndex>1.3375</nsKM:RefractiveIndex>

    <nsKM:KM>
      <nsKM:R>
        <nsKM:List No="1">
          <nsKM:R1>
            <nsKM:Radius unit="mm">8.05</nsKM:Radius>
            <nsKM:Power unit="D">45.00</nsKM:Power>
            <nsKM:Axis unit="deg">180</nsKM:Axis>
          </nsKM:R1>
          <nsKM:R2>
```

```
        <nsKM:Radius unit="mm">7.65</nsKM:Radius>
        <nsKM:Power unit="D">44.95</nsKM:Power>
        <nsKM:Axis unit="deg">68</nsKM:Axis>
    </nsKM:R2>
    <nsKM:Average>
        <nsKM:Radius unit="mm">7.85</nsKM:Radius>
        <nsKM:Power unit="D">43.35</nsKM:Power>
    </nsKM:Average>
    <nsKM:Cylinder>
        <nsKM:Power unit="D">-2.50</nsKM:Power>
        <nsKM:Axis unit="deg">150</nsKM:Axis>
    </nsKM:Cylinder>
</nsKM:List>
<nsKM:List No="2">
    <nsKM:Error></nsKM:Error>
</nsKM:List>
<nsKM:List No="3">
    <nsKM:R1>
        <nsKM:Radius unit="mm">8.05</nsKM:Radius>
        <nsKM:Power unit="D">45.00</nsKM:Power>
        <nsKM:Axis unit="deg">180</nsKM:Axis>
    </nsKM:R1>
    <nsKM:R2>
        <nsKM:Radius unit="mm">7.65</nsKM:Radius>
        <nsKM:Power unit="D">44.95</nsKM:Power>
        <nsKM:Axis unit="deg">68</nsKM:Axis>
    </nsKM:R2>
    <nsKM:Average>
        <nsKM:Radius unit="mm">7.85</nsKM:Radius>
        <nsKM:Power unit="D">43.35</nsKM:Power>
    </nsKM:Average>
    <nsKM:Cylinder>
        <nsKM:Power unit="D">-2.50</nsKM:Power>
        <nsKM:Axis unit="deg">150</nsKM:Axis>
    </nsKM:Cylinder>
</nsKM:List>
</nsKM:R>
<nsKM:L>
    <nsKM:List No="1">
        <nsKM:R1>
            <nsKM:Radius unit="mm">8.04</nsKM:Radius>
            <nsKM:Power unit="D">42.00</nsKM:Power>
            <nsKM:Axis unit="deg">133</nsKM:Axis>
        </nsKM:R1>
        <nsKM:R2>
            <nsKM:Radius unit="mm">7.54</nsKM:Radius>
            <nsKM:Power unit="D">44.75</nsKM:Power>
            <nsKM:Axis unit="deg">43</nsKM:Axis>
        </nsKM:R2>
        <nsKM:Average>
            <nsKM:Radius unit="mm">7.65</nsKM:Radius>
            <nsKM:Power unit="D">43.25</nsKM:Power>
        </nsKM:Average>
        <nsKM:Cylinder>
            <nsKM:Power unit="D">-2.75</nsKM:Power>
            <nsKM:Axis unit="deg">133</nsKM:Axis>
        </nsKM:Cylinder>
```

```
</nsKM:List>
<nsKM:List No="2">
  <nsKM:R1>
    <nsKM:Radius unit="mm">8.04</nsKM:Radius>
    <nsKM:Power unit="D">42.00</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:R1>
  <nsKM:R2>
    <nsKM:Radius unit="mm">7.54</nsKM:Radius>
    <nsKM:Power unit="D">44.75</nsKM:Power>
    <nsKM:Axis unit="deg">43</nsKM:Axis>
  </nsKM:R2>
  <nsKM:Average>
    <nsKM:Radius unit="mm">7.65</nsKM:Radius>
    <nsKM:Power unit="D">43.25</nsKM:Power>
  </nsKM:Average>
  <nsKM:Cylinder>
    <nsKM:Power unit="D">-2.75</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:Cylinder>
</nsKM:List>
<nsKM:List No="3">
  <nsKM:R1>
    <nsKM:Radius unit="mm">7.85</nsKM:Radius>
    <nsKM:Power unit="D">43.75</nsKM:Power>
    <nsKM:Axis unit="deg">180</nsKM:Axis>
  </nsKM:R1>
  <nsKM:R2>
    <nsKM:Radius unit="mm">8.25</nsKM:Radius>
    <nsKM:Power unit="D">44.80</nsKM:Power>
    <nsKM:Axis unit="deg">90</nsKM:Axis>
  </nsKM:R2>
  <nsKM:Average>
    <nsKM:Radius unit="mm">7.65</nsKM:Radius>
    <nsKM:Power unit="D">43.50</nsKM:Power>
  </nsKM:Average>
  <nsKM:Cylinder>
    <nsKM:Power unit="D">+2.25</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:Cylinder>
</nsKM:List>
<nsKM:List No="4">
  <nsKM:R1>
    <nsKM:Radius unit="mm">8.50</nsKM:Radius>
    <nsKM:Power unit="D">42.00</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:R1>
  <nsKM:R2>
    <nsKM:Radius unit="mm">8.54</nsKM:Radius>
    <nsKM:Power unit="D">42.35</nsKM:Power>
    <nsKM:Axis unit="deg">180</nsKM:Axis>
  </nsKM:R2>
  <nsKM:Average>
    <nsKM:Radius unit="mm">7.65</nsKM:Radius>
    <nsKM:Power unit="D">43.25</nsKM:Power>
  </nsKM:Average>
  <nsKM:Cylinder>
```

```
<nsKM:Power unit="D">-0.25</nsKM:Power>
<nsKM:Axis unit="deg">133</nsKM:Axis>
</nsKM:Cylinder>
</nsKM>List>
<nsKM>List No="5">
  <nsKM:R1>
    <nsKM:Radius unit="mm">8.04</nsKM:Radius>
    <nsKM:Power unit="D">42.00</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:R1>
  <nsKM:R2>
    <nsKM:Radius unit="mm">7.54</nsKM:Radius>
    <nsKM:Power unit="D">44.75</nsKM:Power>
    <nsKM:Axis unit="deg">43</nsKM:Axis>
  </nsKM:R2>
  <nsKM:Average>
    <nsKM:Radius unit="mm">7.65</nsKM:Radius>
    <nsKM:Power unit="D">43.25</nsKM:Power>
  </nsKM:Average>
  <nsKM:Cylinder>
    <nsKM:Power unit="D">-2.75</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:Cylinder>
</nsKM>List>
<nsKM:Median>
  <nsKM:R1>
    <nsKM:Radius unit="mm">7.25</nsKM:Radius>
    <nsKM:Power unit="D">42.50</nsKM:Power>
    <nsKM:Axis unit="deg">180</nsKM:Axis>
  </nsKM:R1>
  <nsKM:R2>
    <nsKM:Radius unit="mm">7.54</nsKM:Radius>
    <nsKM:Power unit="D">44.75</nsKM:Power>
    <nsKM:Axis unit="deg">43</nsKM:Axis>
  </nsKM:R2>
  <nsKM:Average>
    <nsKM:Radius unit="mm">7.65</nsKM:Radius>
    <nsKM:Power unit="D">43.25</nsKM:Power>
  </nsKM:Average>
  <nsKM:Cylinder>
    <nsKM:Power unit="D">-2.75</nsKM:Power>
    <nsKM:Axis unit="deg">133</nsKM:Axis>
  </nsKM:Cylinder>
</nsKM:Median>
</nsKM:L>
</nsKM:KM>

<nsKM:Pupil>
  <nsKM:R>
    <nsKM:PupilSize unit="mm" Lamp="on">3.5</nsKM:PupilSize>
  </nsKM:R>
  <nsKM:L>
    <nsKM:PupilSize unit="mm" Lamp="on">3.0</nsKM:PupilSize>
  </nsKM:L>
</nsKM:Pupil>

<nsKM:Corneal>
```

```
<nsKM:R>  
  <nsKM:CornealSize unit="mm">2.5</nsKM:CornealSize>  
</nsKM:R>  
<nsKM:L>  
  <nsKM:CornealSize unit="mm">2.0</nsKM:CornealSize>  
</nsKM:L>  
</nsKM:Corneal>
```

```
<<Unique tag>>  
  .  
  .  
  .  
</Unique tag>
```

Unique tag of each company is specified here. Prefix is not necessary because it is out of the namespace definition.

```
</nsKM:Measure>
```

```
</Ophthalmology>
```

---

## ○ XML file sample of tonometer data

```
=====
<?xml version="1.0" encoding="UTF-8"?>

<?xml-stylesheet type="text/xsl" href="TM_Stylesheet.xsl" ?>

<Ophthalmology xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:nsCommon="http://www.joia.or.jp/standardized/namespaces/Common"
xmlns:nsTM="http://www.joia.or.jp/standardized/namespaces/TM"
xsi:schemaLocation="http://www.joia.or.jp/standardized/namespaces/Common Common_schema.xsd
http://www.joia.or.jp/standardized/namespaces/TM TM_schema.xsd">

  <nsCommon:Common>

    <nsCommon:Company>ABCD</nsCommon:Company>
    <nsCommon:ModelName>ABC-123</nsCommon:ModelName>
    <nsCommon:MachineNo>1234</nsCommon:MachineNo>
    <nsCommon:ROMVersion>1.0</nsCommon:ROMVersion>
    <nsCommon:Version>1.4</nsCommon:Version>
    <nsCommon:Date>2008-09-01</nsCommon:Date>
    <nsCommon:Time>19:36:28</nsCommon:Time>

    <nsCommon:Patient>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
      <nsCommon:FirstName>TARO</nsCommon:FirstName>
      <nsCommon:MiddleName></nsCommon:MiddleName>
      <nsCommon:LastName>TANAKA</nsCommon:LastName>
      <nsCommon:Sex>M</nsCommon:Sex>
      <nsCommon:Age>18</nsCommon:Age>
      <nsCommon:DOB>1975-08-16</nsCommon:DOB>
      <nsCommon:NameJ1>田中 太郎</nsCommon:NameJ1>
      <nsCommon:NameJ2>たなか たろう</nsCommon:NameJ2>
    </nsCommon:Patient>

    <nsCommon:Operator>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
    </nsCommon:Operator>

  </nsCommon:Common>

  <nsTM:Measure type="TM">

    <nsTM:TM>
      <nsTM:R>
        <nsTM>List No="1">
          <nsTM:IOP_mmHg unit="mmHg">24.0</nsTM:IOP_mmHg>
          <nsTM:IOP_Pa unit="kPa">3.2</nsTM:IOP_Pa>
          <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
        </nsTM>List>
        <nsTM>List No="2">
          <nsTM:IOP_mmHg unit="mmHg">21.0</nsTM:IOP_mmHg>
          <nsTM:IOP_Pa unit="kPa">2.8</nsTM:IOP_Pa>
          <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
        </nsTM>List>
      </nsTM:R>
    </nsTM:TM>
  </nsTM:Measure>
</Ophthalmology>
```

```
<nsTM:List No="3">
  <nsTM:IOP_mmHg unit="mmHg">22.0</nsTM:IOP_mmHg>
  <nsTM:IOP_Pa unit="kPa">2.9</nsTM:IOP_Pa>
  <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
</nsTM:List>
<nsTM:Average>
  <nsTM:IOP_mmHg unit="mmHg">22.3</nsTM:IOP_mmHg>
  <nsTM:IOP_Pa unit="kPa">2.97</nsTM:IOP_Pa>
</nsTM:Average>
</nsTM:R>
<nsTM:L>
  <nsTM:List No="1">
    <nsTM:IOP_mmHg unit="mmHg">24.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">3.2</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="2">
    <nsTM:IOP_mmHg unit="mmHg">21.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.8</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="3">
    <nsTM:IOP_mmHg unit="mmHg">22.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.9</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="4">
    <nsTM:IOP_mmHg unit="mmHg">24.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">3.2</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="5">
    <nsTM:IOP_mmHg unit="mmHg">21.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.8</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="6">
    <nsTM:IOP_mmHg unit="mmHg">22.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.9</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="7">
    <nsTM:IOP_mmHg unit="mmHg">24.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">3.2</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex></nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="8">
    <nsTM:IOP_mmHg unit="mmHg">21.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.8</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="9">
    <nsTM:IOP_mmHg unit="mmHg">22.0</nsTM:IOP_mmHg>
    <nsTM:IOP_Pa unit="kPa">2.9</nsTM:IOP_Pa>
    <nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
  </nsTM:List>
  <nsTM:List No="10">
```

```
<nsTM:IOP_mmHg unit="mmHg">24.0</nsTM:IOP_mmHg>
<nsTM:IOP_Pa unit="kPa">3.2</nsTM:IOP_Pa>
<nsTM:ConfidenceIndex>*</nsTM:ConfidenceIndex>
</nsTM:List>
<nsTM:Average>
  <nsTM:IOP_mmHg unit="mmHg">22.5</nsTM:IOP_mmHg>
  <nsTM:IOP_Pa unit="kPa">2.99</nsTM:IOP_Pa>
</nsTM:Average>
</nsTM:L>
</nsTM:TM>

<nsTM:CorrectedIOP>
  <nsTM:Formula1 No="1">
    <nsTM:R>
      <nsTM:Param1 unit="mm">0.554</nsTM:Param1>
      <nsTM:Param2>0.0450</nsTM:Param2>
      <nsTM:CCT unit="mm">0.588</nsTM:CCT>
      <nsTM:Measured>
        <nsTM:IOP_mmHg unit="mmHg">22.3</nsTM:IOP_mmHg>
        <nsTM:IOP_Pa unit="kPa">2.97</nsTM:IOP_Pa>
      </nsTM:Measured>
      <nsTM:Corrected>
        <nsTM:IOP_mmHg unit="mmHg">20.8</nsTM:IOP_mmHg>
        <nsTM:IOP_Pa unit="kPa">2.77</nsTM:IOP_Pa>
      </nsTM:Corrected>
    </nsTM:R>
    <nsTM:L>
      <nsTM:Param1 unit="mm">0.554</nsTM:Param1>
      <nsTM:Param2>0.0450</nsTM:Param2>
      <nsTM:CCT unit="mm">0.588</nsTM:CCT>
      <nsTM:Measured>
        <nsTM:IOP_mmHg unit="mmHg">22.5</nsTM:IOP_mmHg>
        <nsTM:IOP_Pa unit="kPa">2.99</nsTM:IOP_Pa>
      </nsTM:Measured>
      <nsTM:Corrected>
        <nsTM:IOP_mmHg unit="mmHg">21.0</nsTM:IOP_mmHg>
        <nsTM:IOP_Pa unit="kPa">2.76</nsTM:IOP_Pa>
      </nsTM:Corrected>
    </nsTM:L>
  </nsTM:Formula1>
</nsTM:CorrectedIOP>

<(Unique tag)>
  .
  .
  .
</(Unique tag)>

</nsTM:Measure>

</Ophthalmology>
```

Unique tag of each company is specified here. Prefix is not necessary because it is out of the namespace definition.



## ○ XML file sample of lensmeter data

```
-----
<?xml version="1.0" encoding="UTF-16"?>

<Ophthalmology xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:nsCommon="http://www.joia.or.jp/standardized/namespaces/Common"
xmlns:nsLM="http://www.joia.or.jp/standardized/namespaces/LM"
xsi:schemaLocation="http://www.joia.or.jp/standardized/namespaces/Common Common_schema.xsd
http://www.joia.or.jp/standardized/namespaces/LM LM_schema.xsd">

  <nsCommon:Common>

    <nsCommon:Company>ABCD</nsCommon:Company>
    <nsCommon:ModelName>ABC-123</nsCommon:ModelName>
    <nsCommon:MachineNo>1234</nsCommon:MachineNo>
    <nsCommon:ROMVersion>1.0</nsCommon:ROMVersion>
    <nsCommon:Version>1.4</nsCommon:Version>
    <nsCommon:Date>2008-09-01</nsCommon:Date>
    <nsCommon:Time>19:36:28</nsCommon:Time>

    <nsCommon:Patient>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
      <nsCommon:FirstName>TARO</nsCommon:FirstName>
      <nsCommon:MiddleName></nsCommon:MiddleName>
      <nsCommon:LastName>TANAKA</nsCommon:LastName>
      <nsCommon:Sex>M</nsCommon:Sex>
      <nsCommon:Age>18</nsCommon:Age>
      <nsCommon:DOB>1975-08-16</nsCommon:DOB>
      <nsCommon:NameJ1>田中 太郎</nsCommon:NameJ1>
      <nsCommon:NameJ2>たなか たろう</nsCommon:NameJ2>
    </nsCommon:Patient>

    <nsCommon:Operator>
      <nsCommon:No.>123456</nsCommon:No.>
      <nsCommon:ID>ABCDEFG</nsCommon:ID>
    </nsCommon:Operator>

  </nsCommon:Common>

  <nsLM:Measure type="LM">

    <nsLM:MeasureMode>Progressive</nsLM:MeasureMode>
    <nsLM:DiopterStep unit="D">0.25</nsLM:DiopterStep>
    <nsLM:AxisStep unit="deg">1</nsLM:AxisStep>
    <nsLM:CylinderMode>-</nsLM:CylinderMode>
    <nsLM:PrismDiopterStep unit="pri">0.25</nsLM:PrismDiopterStep>
    <nsLM:PrismBaseStep unit="deg">1</nsLM:PrismBaseStep>
    <nsLM:PrismMode>xy</nsLM:PrismMode>
    <nsLM:AddMode>add</nsLM:AddMode>

  <nsLM:LM>
    <nsLM:S>
```

```
<nsLM:Sphere unit="D">-3.00</nsLM:Sphere>
<nsLM:Cylinder unit="D">-11.00</nsLM:Cylinder>
<nsLM:Axis unit="deg">180</nsLM:Axis>
<nsLM:SE unit="D">-8.50</nsLM:SE>
<nsLM:ADD unit="D">1.50</nsLM:ADD>
<nsLM:ADD2 unit="D">2.00</nsLM:ADD2>
<nsLM:NearSphere unit="D">-1.50</nsLM:NearSphere>
<nsLM:NearSphere2 unit="D">-1.00</nsLM:NearSphere2>
<nsLM:Prism unit="pri">0.25</nsLM:Prism>
<nsLM:PrismBase unit="deg">102</nsLM:PrismBase>
<nsLM:PrismX unit="pri" base="in">0.00</nsLM:PrismX>
<nsLM:PrismY unit="pri" base="up">0.25</nsLM:PrismY>
<nsLM:UVTransmittance unit="%">5</nsLM:UVTransmittance>
<nsLM:ConfidenceIndex>CYL_OVERFLOW</nsLM:ConfidenceIndex>
</nsLM:S>
<nsLM:R>
  <nsLM:Sphere unit="D">-3.00</nsLM:Sphere>
  <nsLM:Cylinder unit="D">0.00</nsLM:Cylinder>
  <nsLM:Axis unit="deg">0</nsLM:Axis>
  <nsLM:SE unit="D">-3.00</nsLM:SE>
  <nsLM:ADD unit="D">1.50</nsLM:ADD>
  <nsLM:ADD2 unit="D">2.00</nsLM:ADD2>
  <nsLM:NearSphere unit="D">-1.50</nsLM:NearSphere>
  <nsLM:NearSphere2 unit="D">-1.00</nsLM:NearSphere2>
  <nsLM:Prism unit="pri">0.25</nsLM:Prism>
  <nsLM:PrismBase unit="deg">102</nsLM:PrismBase>
  <nsLM:PrismX unit="pri" base="in">0.00</nsLM:PrismX>
  <nsLM:PrismY unit="pri" base="up">0.25</nsLM:PrismY>
  <nsLM:UVTransmittance unit="%">5</nsLM:UVTransmittance>
  <nsLM:ConfidenceIndex></nsLM:ConfidenceIndex>
</nsLM:R>
<nsLM:L>
  <nsLM:Sphere unit="D">-2.00</nsLM:Sphere>
  <nsLM:Cylinder unit="D">-1.00</nsLM:Cylinder>
  <nsLM:Axis unit="deg">176</nsLM:Axis>
  <nsLM:SE unit="D">-2.50</nsLM:SE>
  <nsLM:ADD unit="D">1.75</nsLM:ADD>
  <nsLM:ADD2 unit="D">2.00</nsLM:ADD2>
  <nsLM:NearSphere unit="D">-0.25</nsLM:NearSphere>
  <nsLM:NearSphere2 unit="D">0.00</nsLM:NearSphere2>
  <nsLM:Prism unit="pri">2.50</nsLM:Prism>
  <nsLM:PrismBase unit="deg">90</nsLM:PrismBase>
  <nsLM:PrismX unit="pri" base="out">0.00</nsLM:PrismX>
  <nsLM:PrismY unit="pri" base="up">2.50</nsLM:PrismY>
  <nsLM:UVTransmittance unit="%">5</nsLM:UVTransmittance>
  <nsLM:ConfidenceIndex></nsLM:ConfidenceIndex>
</nsLM:L>
</nsLM:LM>

<nsLM:PD>
  <nsLM:Distance unit="mm">58.5</nsLM:Distance>
  <nsLM:DistanceR unit="mm">29.5</nsLM:DistanceR>
  <nsLM:DistanceL unit="mm">29.0</nsLM:DistanceL>
  <nsLM:Near unit="mm"></nsLM:Near>
  <nsLM:NearR unit="mm"></nsLM:NearR>
```

```
<nsLM:NearL unit="mm"></nsLM:NearL>  
</nsLM:PD>
```

```
<(Unique tag)>  
.  
.  
.  
</(Unique tag)>
```

Unique tag of each company is specified here. Prefix is not necessary because it is out of the namespace definition.

```
</nsLM:Measure>
```

```
</Ophthalmology>
```

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**Revision history**

Date	Version	Content / Reason
October 21, 2008	JOIA · STD 001-1.0-2009	Establishment
August 28, 2009	JOIA · STD 001-1.1-2009	Revision/ <ul style="list-style-type: none"><li>· Addition of <math>\Delta</math> to the explanation in the necessity field of the tag definition.</li><li>· Addition of &lt;REF&gt; tag to the refractometer data of the tag definition.</li><li>· Addition of &lt;KM&gt; tag to the keratometer data of the tag definition.</li><li>· Addition of &lt;RefractiveIndex&gt; and &lt;Corneal&gt; tags to the keratometer data of the tag definition.</li><li>· Change of definition position of optional tags.</li><li>· Addition of explanation paragraph of the namespace.</li><li>· Change of XML file samples to the samples using namespaces.</li><li>· Change of XML file samples to the samples using optional tags.</li></ul>
March 12, 2010	JOIA · STD 001-1.2-2010	Revision/ <ul style="list-style-type: none"><li>· Addition of description of tonometer data.</li></ul>
December 7, 2010	JOIA · STD 001-1.3-2010	Revision/ <ul style="list-style-type: none"><li>· Deletion of the notice of patient's name in other languages.</li><li>· Addition of character code specification.</li><li>· Correction of mistake of name tag.</li><li>· Corrected to no patient number is required.</li><li>· Clarification of method of describing sex</li><li>· Correction of sample according to the above</li></ul>
October 17, 2012	JOIA · STD 001-1.4-2012	Revision/ <ul style="list-style-type: none"><li>· Addition of UTF-16 to the character code specification.</li><li>· Addition of the lens meter tag definition.</li></ul>